



**Associate Degree in Aviation  
Professional Pilot**

# Program Summary

In partnership with:



Accredited by:



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**BryanCollege**  
SINCE 1940

# Summary of Courses



The Bryan College Associate Degree in Aviation Professional Pilot was designed by aviation industry experts and aligned with current competencies that aviation employers need. Based upon a collaboration between Bryan College and our FAA-approved flight training partner, California Flight Academy (CFA), the program provides you the necessary pilot licenses and ratings, flight hours, and an unparalleled level of knowledge and skills to secure your future as a successful professional pilot.

To successfully graduate, students must complete the following courses. Note that these are summarized course descriptions – for full course descriptions, please refer to the official Bryan College catalog. Courses highlighted orange are provided by CFA as part of your flight training.

## **AERO-100—Introduction to Aeronautical Sciences—3.0 credits**

This course is designed to prepare students to be successful in the Aviation Professional Pilot program by providing an overview of the field of aviation, including the history and development of aeronautics and the basics of flight theory.

## **UNV-101S—Student Success and Technology Foundations—3.0 credits**

A course covering the information and skills needed to succeed in academic studies, including study skills, setting academic goals, managing time, and technology skills such as word processing, presentations, and spreadsheets.

## **AERO-105—Aviation Safety—3.0 credits**

This course covers information regarding airport and airline safety and security, aviation regulations, aircraft and air traffic control safety systems, as well as accident investigation and how to record and report safety data.

## **AERO-112—Introduction to Technology Resources—3.0 credits**

This course provides students with an understanding of technology as it relates to aviation, such as how to navigate computer systems, utilize flight management systems, and manage global positioning systems.

## **AERO-115—Flight Physiology —3.0 credits**

This course covers the aeromedical factors associated with the effects of flying on the human body.

## **AERO-125— Aircraft Performance—3.0 credits**

This course provides students with foundational knowledge related to aircraft performance. Students will identify the performance factors associated with single/multi, reciprocating, turboprop, and jet engine aircraft.

## **AERO-130—Introduction to Physics—3.0 credits**

This course helps students connect the physical rules of the universe with the aeronautical principles behind flight. Students will explore basic physics principles, including motion, force, Newton's Laws of Motion, gravitation, and thermodynamics.

## **AERO-135— Crew Resource Management—3.0 credits**

This course explores the processes, procedures, and best practices associated with in-flight decision making (Crew Resource Management) in all phases of flight, as well as learning the FAA and NTSB safety regulations associated with domestic and international flight.

## **AERO-200—Private Pilot Airplane Single Engine Land—3.0 credits**

The Private Pilot Single-Engine Certification Course is to teach the student the knowledge and skill to operate a single-engine airplane safely in the National Airspace System as a Private pilot.

**AERO-201—Commercial Pilot Airplane Single-Engine Land—3.0 credits**

The objective of this Commercial Pilot Single-Engine Certification course is to teach the student the knowledge and skill to operate an airplane safely in the National Airspace System as a commercial pilot.

**AERO-202—Instrument Rating—3.0 credits**

The course is designed to allow either a private or a commercial pilot to add an airplane instrument rating to an existing certificate.

**AERO-203—Multi-Engine Rating—3.0 credits**

The course is designed to allow either a private or a commercial pilot to add an airplane multi-engine land class rating to an existing certificate.

**AERO-208—Domestic and International Navigation—3.0 credits**

This course prepares students to navigate within the United States and international airspace. Students will learn how to prepare and file flight plans, obtain and navigate flight clearances, use performance and systems theory, and aircraft instruments.

**AERO-215—Aviation Weather—3.0 credits**

This course provides students with the knowledge required to understand atmospheric science and its effects on aviation.

**AERO-220—Aircraft Systems—3.0 credits**

This course covers the systems and components of a single/multi-engine aircraft, including the electrical, hydraulic, flight control, fuel, vacuum, landing gear, pressurization, environmental control, constant speed propeller, flight management and auxiliary systems. Students will also explore the systems in turboprop and jet-engine aircraft.

**AERO-225—Foundations of Aircraft Jet Propulsion—3.0 credits**

This course introduces students to the workings and operations of aircraft jet propulsion systems. Topics include the creation of thrust in jet engines, overall jet engine design, and future trends in jet engine development.

**AERO-230—Aviation Career Strategies—3.0 credits**

This course prepares students to successfully find a job or advance in an aviation career. Topics include an overview of jobs in the aviation industry, networking, resume writing, job searching, and preparation for aviation-specific interview questions.

**\*CRT-110—Critical Thinking I—3.0 credits**

This course encompasses the concepts and processes of logical reasoning with emphasis on the comprehension, analysis, and creation of arguments, as well as the characteristics of a critical thinker.

**\*PSY-101S—Psychology Foundations—3.0 credits**

A course covering the foundational concepts related to human behavior. Topics include the human mind, human behavior, and important experiments and research in the field of psychology.

**\*MAT-110—College Math—3.0 credits**

A course covering basic math computational skills, including the number system, equations and expressions, ratios and proportions, number and quantity, functions, and basic algebra concepts.

**\*SOC-200S—Social Psychology—3.0 credits**

A course covering the fundamentals of social psychology and group behavior. The course focuses on how individuals are influenced by other people and situations.

\*Denotes a general education course.

## Course and Credit Summary

**Total credits earned through CFA:**

**18 credits**

**Total credits earned through Bryan College:**

**45 credits**

**Total program credits:**

**63 credits**

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## Admissions Process

- Step 1: Interview with admissions
- Step 2: Complete the application
- Step 3: Complete the enrollment documentation
- Step 4: Complete financial plan
- Step 5: Attend orientation

